VANGUARD ELECTRONICS

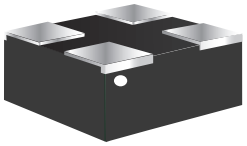
SMT Power Inductors for Extreme Environments

XT60000 Series

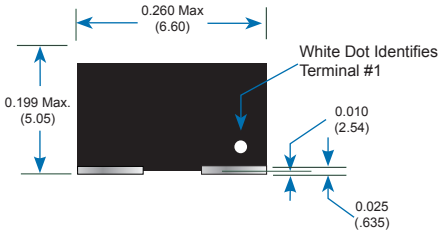
Package A0: .25 to 6.6 A, .020 to 103uH

17941 Brookshire Lane Huntington Beach, CA 92647 Ph: 714-842-3330

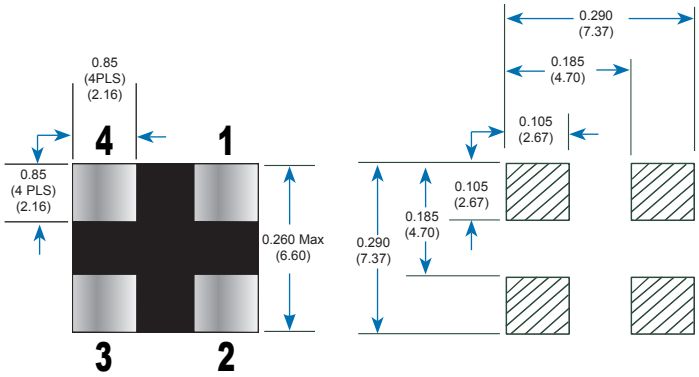
Inches
(Millimeters)



Side View



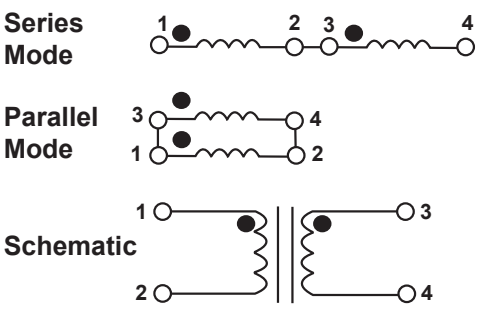
Bottom View



Recommended
Mounting Pad

Circuit Side

TYPICAL USER CONNECTIONS



ELECTRICAL SPECIFICATIONS

- **Operating Temperature:** -55ºC to + 200ºC
- **Inductance Operating Temperature:** ± 3%
- **Temperature Rise:** Less than 30ºC
- **Inductance Drop:** Less than 30% with rated DC through inductor windings
- **Different values of inductance or turns ratio available on special request**
- **Dielectric Strength:** 100 Vrms

FEATURES

- **High Temperature materials make these parts ideal for geophysical applications in environments up to 200ºC**
- **Welded internal connections - no reflow risk**
- **Compact, low profile, surface mountable package**
- **Leadless device, allowing for economy in packaging space**
- **Terminations are tin-lead coated phosphor bronze, suitable for a variety of soldering processes. Other HMP solder alloy coatings available**
- **Ideal for automatic placement**
- **Different values of inductance or turns ratio available**

APPLICATIONS

In downhole environments, use for:

- **Filter inductors**
- **Ripple suppressors**
- **Common mode chokes**
- **Isolation transformers**
- **Step up transformers**
- **Step down transformers**

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VE Part Number	Series Inductance uH ±12%	Series Rated D.C. mA	Series D.C. Res. Ohms Max.	Parallel Inductance uH ± 12%	Parallel Rated D .C. mA	Parallel D.C. Res. Ohms Max
XT60073	.08	3300	.020	.020	6600	.005
XT60074	.14	2800	.024	.035	5600	.006
XT60075	.22	2400	.036	.055	4600	.009
XT60076	.44	1800	.056	.110	3600	.014
XT60077	.56	1500	.072	.140	3000	.018
XT60078	.60	2300	.036	.150	4600	.009
XT60079	.86	1900	.048	.215	3800	.012
XT60080	1.30	1900	.048	.349	3800	.012
XT60081	1.86	1800	.052	.465	3600	.013
XT60082	2.44	1700	.060	.610	3400	.015
XT60083	3.33	1500	.064	.833	3000	.016
XT60084	4.32	1200	.084	1.08	2400	.020
XT60085	5.52	1000	.120	1.38	2000	.030
XT60086	8.24	950	.160	2.06	1900	.040
XT60087	9.80	850	.240	2.45	1700	.060
XT60088	11.48	800	.260	2.87	1600	.065
XT60089	13.32	750	.280	3.33	1500	.070
XT60090	17.40	650	.360	4.35	1300	.090
XT60091	19.65	600	.400	4.91	1200	.100
XT60092	22.04	550	.500	5.51	1100	.125
XT60093	27.20	500	.560	6.80	1000	.140
XT60094	32.92	450	.600	8.23	900	.150
XT60095	49.60	400	.900	12.40	800	.225
XT60096	61.20	350	1.30	15.30	700	.325
XT60097	78.60	300	1.52	19.65	600	.380
XT60098	93.08	280	2.20	23.27	560	.550
XT60099	103.44	250	2.40	25.86	500	.600

Coming soon - more data on performance at higher temperatures and extended periods. Please check back on VE1.com for the latest.